

CLAIMS

WHAT IS CLAIMED IS:

1. A method for operating a computer to present historical information about hyperlinks shown on web pages, the method comprising operations of:

responsive to each occasion on which a computer receives user selection of a hyperlink to download underlying data represented by the hyperlink, the computer downloading the underlying data represented by the hyperlink and recording predetermined types characteristics of the underlying data in a database;

responsive to a computer receiving predetermined user input including direction of a cursor proximate a hyperlink,

the computer consulting the database to determine whether one or more users in a predefined access group have previously selected the hyperlink to download underlying data represented by the hyperlink;

and

only if one or more of the users have previously selected the hyperlink, presenting information representing characteristics of the underlying data obtained from previous selections of the hyperlink by users in the access group.

1 2. The method of claim 1, the presenting operation including at least one of the
2 following: displaying text, displaying graphics, generating sound, providing tactile output.

1 3. The method of claim 1, the operations further comprising:
2 prior to consulting the database, selecting the database from multiple available
3 databases.

1 4. The method of claim 1, where:
2 the operations further comprise, the computer obtaining user selection of types of
3 characteristics of interest to the user;
4 the presenting operation is limited to characteristics of the underlying data of the
5 selected types.

1 5. The method of claim 1, the predetermined user input additionally including
2 depressing of one or more buttons on a computer mouse while the cursor is proximate the
3 hyperlink.

1 6. The method of claim 1, the access group having a sole user, and the presenting
2 operation presenting information representing characteristics of the underlying data
3 obtained from previous selections of the hyperlink by the sole user.

1 7. The method of claim 1, the access group having multiple users, and the presenting
2 operation presenting information representing characteristics of the underlying data
1 obtained from previous selections of the hyperlink by any of the multiple users.

1 8. The method of claim 1, the operations additionally comprising, further response to
2 each occasion on which the computer receives user selection of a hyperlink to download
3 underlying data represented by the hyperlink:

4 the computer soliciting user specification of one of more of the following for the
5 underlying data:

6 user rating of the underlying data;

7 one or more representative multimedia symbols of one or more of the
8 following types: graphics images, sounds, videos, animations, tactile
9 sensations;

10 the computer recording the user specification in the database in association with
11 the hyperlink.

1 9. The method of claim 1, where the characteristics of the underlying data obtained
2 from previous selections include one or more of the following:

3 size of the underlying data;

4 dates of one or more previous selections of the hyperlink;

5 information representing a length of time required to download the underlying data;

6 times of or more previous selections of the hyperlink;

7 number of previous selections of the hyperlink;
8 one or more representative multimedia symbols, including one or more of the
9 following: graphics, sound, animation, video;
10 user ratings of the underlying data;
11 whether the underlying data constitutes a web site that is under construction;
12 whether the hyperlink represents an expired link;
13 whether the user has bookmarked the underlying data;
14 any errors occurring during previous selections of the hyperlink.

1 10. A method for operating a computer to present historical information about hyperlinks
2 shown on web pages, the method comprising operations of:

3 responsive to each occasion on which a computer receives user selection of a
4 hyperlink to download underlying data represented by the hyperlink, the
5 computer downloading the underlying data represented by the hyperlink and
6 recording predetermined types characteristics of the underlying data in a
7 database;

8 responsive to user instructions to download a web page,

9 the computer identifying any hyperlinks contained in the web page and
10 determining whether one or more users in a predefined access group
11 have previously selected the hyperlink to download underlying data
12 represented by the hyperlink;

for each previously selected hyperlink, retrieving one or more characteristics of the underlying data obtained from previous selections of the hyperlink by users in the access group; and during times when the computer receives predetermined user input including direction of a cursor proximate a hyperlink, the computer presenting information representative of the retrieved characteristics for the proximate hyperlink.

11. A method for operating a computer to present hyperlink specific historical information for a predefined group of computer users, the method comprising the operations of:

responsive to any user in the group selecting a hyperlink to download underlying data represented by the hyperlink, recording predetermined characteristics of the underlying data in a shared database accessible to all users in the group;

responsive to any user in the group directing a computer to perform predetermined actions including directing a cursor proximate a hyperlink, that computer accessing the shared database to determine whether any user in the group has previously selected the hyperlink to download underlying data represented by the hyperlink, and only if one or more users in the group have previously selected the hyperlink, the computer referencing the shared database to obtain characteristics of the underlying data from the previous

15 selections of the hyperlink and then presenting information representing the
16 obtained characteristic to the user.

1 12. A signal-bearing medium tangibly embodying a program of machine-readable
2 instructions executable by a digital processing apparatus to perform a method for operating
3 a computer to present historical information about hyperlinks shown on web pages, the
4 method comprising operations of:

5 responsive to each occasion on which a computer receives user selection of a
6 hyperlink to download underlying data represented by the hyperlink, the
7 computer downloading the underlying data represented by the hyperlink and
8 recording predetermined types characteristics of the underlying data in a
9 database;

10 responsive to a computer receiving predetermined user input including direction of
11 a cursor proximate a hyperlink,

12 the computer consulting the database to determine whether one or more
13 users in a predefined access group have previously selected the
14 hyperlink to download underlying data represented by the hyperlink;
15 and

16 only if one or more of the users have previously selected the hyperlink,
17 presenting information representing characteristics of the underlying
18 data obtained from previous selections of the hyperlink by users in the
19 access group.

1 13. The medium of claim 12, the presenting operation including at least one of the
2 following: displaying text, displaying graphics, generating sound, providing tactile output.

1 14. The medium of claim 12, the operations further comprising:
2 prior to consulting the database, selecting the database from multiple available
3 databases.

1 15. The medium of claim 12, where:
2 the operations further comprise, the computer obtaining user selection of types of
3 characteristics of interest to the user;
4 the presenting operation is limited to characteristics of the underlying data of the
5 selected types.

1 16. The medium of claim 12, the predetermined user input additionally including
2 depressing of one or more buttons on a computer mouse while the cursor is proximate the
3 hyperlink.

1 17. The medium of claim 12, the access group having a sole user, and the presenting
2 operation presenting information representing characteristics of the underlying data
3 obtained from previous selections of the hyperlink by the sole user.

1 18. The medium of claim 12, the access group having multiple users, and the presenting
2 operation presenting information representing characteristics of the underlying data
1 obtained from previous selections of the hyperlink by any of the multiple users.

1 19. The medium of claim 12, the operations additionally comprising, further responsive
2 to each occasion on which the computer receives user selection of a hyperlink to download
3 underlying data represented by the hyperlink:

4 the computer soliciting user input specifying one of more of the following for the
5 underlying data:

6 user rating of the underlying data;

7 one or more representative multimedia symbols of one or more of the
8 following types: graphics images, sounds, videos, animations, tactile
9 sensations;

10 the computer recording the user specification in the database in association with
11 the hyperlink.

1 20. The medium of claim 12, where the characteristics of the underlying data obtained
2 from previous selections include one or more of the following:

3 size of the underlying data;

4 dates of one or more previous selections of the hyperlink;

5 information representing a length of time required to download the underlying data;

6 times of or more previous selections of the hyperlink;

number of previous selections of the hyperlink;
one or more representative multimedia symbols, including one or more of the
following: graphics, sound, animation, video;
user ratings of the underlying data;
whether the underlying data constitutes a web site that is under construction;
whether the hyperlink represents an expired link;
whether the user has bookmarked the underlying data;
any errors occurring during previous selections of the hyperlink.

21. A signal-bearing medium tangibly embodying a program of machine-readable instructions executable by a digital processing apparatus to perform a method for operating a computer to present historical information about hyperlinks shown on web pages, the method comprising operations of:

responsive to each occasion on which a computer receives user selection of a
hyperlink to download underlying data represented by the hyperlink, the
computer downloading the underlying data represented by the hyperlink and
recording predetermined types characteristics of the underlying data in a
database;

responsive to user instructions to download a web page,

the computer identifying any hyperlinks contained in the web page and
determining whether one or more users in a predefined access group

13 have previously selected the hyperlink to download underlying data
14 represented by the hyperlink;
15 for each previously selected hyperlink, retrieving one or more characteristics
16 of the underlying data obtained from previous selections of the
17 hyperlink by users in the access group; and
18 during times when the computer receives predetermined user input including
19 direction of a cursor proximate a hyperlink, the computer presenting
20 information representative of the retrieved characteristics for the proximate
21 hyperlink.

22. An information system, comprising:

one or more input devices;

a storage;

an computer, the computer being coupled to the input devices and the storage, and
configured to perform operations to present historical information about
hyperlinks shown on web pages, the operations comprising:

responsive to each occasion on which a computer receives user selection of
a hyperlink to download underlying data represented by the hyperlink,
the computer downloading the underlying data represented by the
hyperlink and recording predetermined types characteristics of the
underlying data in a database;

responsive to a computer receiving predetermined user input including direction of a cursor proximate a hyperlink, the computer consulting the database to determine whether one or more users in a predefined access group have previously selected the hyperlink to download underlying data represented by the hyperlink; and only if one or more of the users have previously selected the hyperlink, presenting information representing characteristics of the underlying data obtained from previous selections of the hyperlink by users in the access group.

23. An information system, comprising:

one or more input devices;

a storage including a database;

a computer, coupled to the input devices and the storage, and configured to

perform operations to present historical information about hyperlinks shown

on web pages, the operations comprising:

responsive to each occasion on which the computer receives user selection

of a hyperlink to download underlying data represented by the

hyperlink, the computer downloading the underlying data represented

by the hyperlink and recording predetermined types characteristics of

the underlying data in a database;

responsive to user instructions to download a web page,
the computer identifying any hyperlinks contained in the web page
and determining whether one or more users in a predefined
access group have previously selected the hyperlink to
download underlying data represented by the hyperlink;
for each previously selected hyperlink, retrieving one or more
characteristics of the underlying data obtained from previous
selections of the hyperlink by users in the access group; and
during times when the computer receives predetermined user input including
direction of a cursor proximate a hyperlink, the computer presenting
information representative of the retrieved characteristics for the
proximate hyperlink.

24. An information system, comprising:
a shared database; and
multiple computers each having access to the shared database;
where the computers are configured to present hyperlink specific historical
download information for a predefined group of computer users by
performing operations comprising:
responsive to any user in the group selecting a hyperlink to download
underlying data represented by the hyperlink, recording

predetermined characteristics of the underlying data in a shared database accessible to all users in the group;

responsive to any user in the group directing a computer to perform predetermined actions including directing a cursor proximate a hyperlink, that computer accessing the shared database to determine whether any user in the group has previously selected the hyperlink to download underlying data represented by the hyperlink, and only if one or more users in the group have previously selected the hyperlink, the computer referencing the shared database to obtain characteristics of the underlying data from the previous selections of the hyperlink and then presenting information representing the obtained characteristic to the user.